

**EPA comments to the BERA Refined ESV Technical Memorandum  
Columbia Falls Aluminum Company NPL Site  
Columbia Falls, Montana  
September 25, 2018**

**Table 1 – Refined ESVs for Soil**

1. Values for trivalent (mammals and birds) and hexavalent (mammals) chromium have been omitted for ORNL. Values are available for these analytes and receptors (as indicated). These values should be added, or justification provided for why they have been omitted.
2. The soil invertebrate screening value for hexavalent chromium is based on ORNL and not LANL. Rationale for this deviation from the hierarchy is not provided in the text.

**Table 2 – Refined ESVs for Sediment**

USEPA Region 5 RCRA ESLs:

3. Dinbenzo(a,h)anthracene – The Region 5 ESL is 0.033 mg/kg, but the Region 5 ESL reported in Table 2 is “---”. The chemical name used for this compound by EPA is *Dinbenz(a,h)anthracene*.

**Table 3 – Refined ESVs for Surface Water**

DEQ-7 Aquatic Life Standards:

4. Lead: The DEQ-7 standard concentration reported in Table 3 is incomplete. The concentration should be reported as 0.545 µg/L, not 0.54 µg/L

USEPA Region 3 Freshwater Screening Benchmarks:

5. Cadmium – Region 3 screening value is 0.25 (@hardness = 100 mg/L), but Table 3 reports the Region 3 screening value as “---”. Advise including a value for this source and updating it to be based on 25 mg/L.
6. Copper, Lead, Nickel, Zinc: The Region 3 screening values reported in Table 3 are based on a hardness of 100 mg/L, not 25 mg/L. Advise updating Region 3 values to be based on a hardness of 25 mg/L.
7. Cyanide: Region 3 screening value (5 µg/L) is reported as Free Cyanide, not Total Cyanide.
8. Fluoride: Region 3 screening value is 2119.4 (@hardness = 100 mg/L), but table 3 reports the Region 3 value as “---”. Advise including a value for this source and updating it to be based on 25 mg/L.